START , 102 OBTAIN ASSEMBLY LANGUAGE PROBRAM DETERMINE STATIC FRE GUENCY EACH ALSTRUCTION TOUSTRUCTION 74 PES 64 FREQUENCY DETERMINE NO. of TYPE OF INSTRUCTIONS NOTESSAMU FOR consect Program ESECUTION CREATE Congressed 505 INSTRUCTION ENCODING RE-EVALUATE Compressed Instruction SET GENERATE NEW ENCODING FOR compressed INSTRUCTION SOT 9 נשיק

F.6.1

100

31 30 29 28 27		14 13		0
Opcode	Instruction 2		Instruction 1	1

Fig. 2

31 30 29 28 27 26 25 24 23	0
ZNCVE2E1H	PC[25:2]

Fig. 3

13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0		СС			8	bit	sigr	ıed	offs	et	

Fig. 4

13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	1		a			b				op		

Fig. 5

13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	1		a		s	ubo	p		0	p=3	1	

Fig. 6

13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	1	In	ıp_	op	su	bop	=7		0	p=3	1	

Fig. 7

13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	1	0		Α			b		op	4	bit	offs	et

Fig. 8

3	12	11	10	9	8	7	6	5	4	3	2	1	0
0	1	1		A			b		op	4	bit	offs	et

Fig. 9

13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0		Α		op			7 b	it of	fset	:	

Fig. 10

13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	1		Α		op	-	7	7 bi	t int	ege	r	

Fig. 11

13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	1	0		Α			op		5	bit	int	ege	r

Fig. 12

13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	1	1		a				h				op	

Fig. 13

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	0		cc			8	bit	sign	ed	offs	et	

Fig. 14

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	1		a			b				ор		

Fig. 15

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	0	0	1		a		s	ubo	p		0	p=3	1	

Fig. 16

						8		-	_	-	_	_	_	0
0	0	0	1	im	ıp_	op	su	bop	=7		0	p=3	1	

Fig. 17

13	12	11	10	9	8	7	6	5	4	3	2	1	0	
0	0	1	0		a			b			5 bi	t of	fset	

Fig. 18

13	12	11	10	9	8	7	6	5	4	3	2	1	0	
0	0	1	1		a			b			5 bi	it o	ffset	

Fig. 19

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	1	0	0		a		op			7 bi	it of	fset	;	

Fig. 20

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	1	0	1		a		op		7	7 bi	t int	ege	r	

Fig. 21

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0		1	0		a			op			bit	t int	ege	r

Fig. 22

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0	1	1	1		a				h				op	

Fig. 23

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0	0		a			b		0	op		С	

Fig. 24

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0	0		a			b		1	op	3	bit i	int

Fig. 25

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	0	1		a		op		7	7 bi	t int	ege	r	

Fig. 26

1	4	13	12	11	10	9	8	7	6	5	4	3	2	1	0
	l	0	1	0		a			b		op	4	bit	offs	et

Fig. 27

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	0	1	1		a			b		op	4	bit	offs	et

Fig. 28

_]	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
ſ	1	0	0	1		a		op		7	bit		ege	r	

Fig. 29

_	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
I	1	0	0	1		a		op		7	bit	int	ege	r	

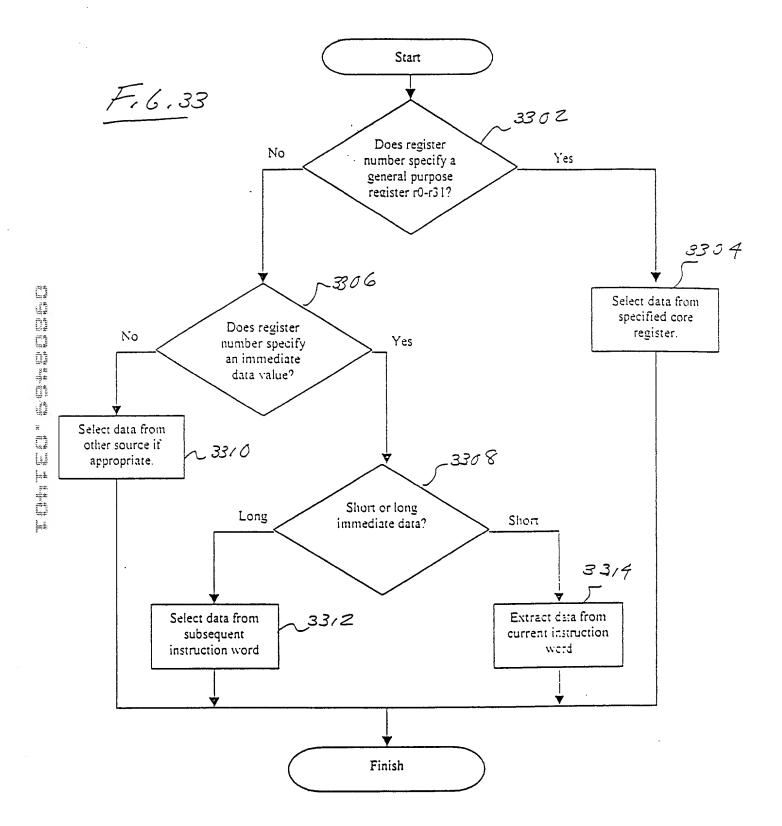
Fig. 30

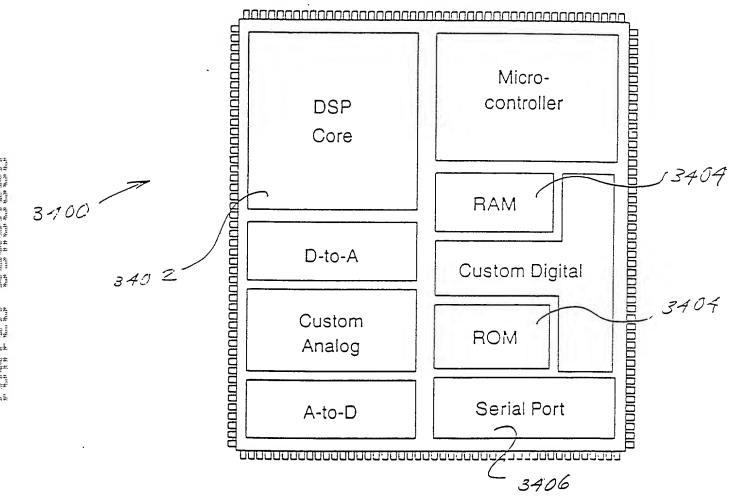
14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	1	1	0]	1 b	it si	igne	d o	ffse	t		

Fig. 31

14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
1	1	1	1					Re	serv	/ed				

Fig. 32





F16. 34

